

**FIG. 1**

378 VESEDTISLFDKLLKEPDALILLAPAAAGDTIISLDFGNSDTEIDDOOLEEVPLYNVMLP MOP1  
380 GAVSEKNFLFTKKEEPEELAQAPTPGDATISLDFGNONFEESAYKAILLPSPQWA MOP2  
475 THPIVPGIPGGIRAGAGKIGRMIAEEIMEIHRIGSLRSCGSSPLNISTPPDASSPG MOP3  
386 EPROHFNALDYGAGSLNTHSPSASSRSHKSHTAHSEPTSTPTKLMAEASIPALPRSA MOP4  
332 PPTGKOAAPAEANAEPOTIOGKRIVKEPGPRETKGSEDSGDEDPSSHPATPRPEFTSVIRA MOP5  
  
438 SPNEKLONINLAMSPLTAETPKLRSSADPALNOEVALKLEPNPESLESLSFTMPQ100Q MOP1  
440 TELRSHSTOSEAGSLPAFTVPOAAAPGSTITPSATSSSSCSITNSPEDYITSLDNDLKIE MOP2  
535 GKILNGSTPDIPSSGSLGGAOENPGYPYSSSSITLGENPHIGIDHIDNDGSSSPSND MOP3  
446 TLPEELPVGLSOAATMAPLPSPSSCDLTOOLLPOTVLOSTPAPMAOFAOFSMFOTIK MOP4  
392 GVLKODPVVRPWGLAPP60PPPTILLHAGFLPPVVRGLCTPGTIRYGPAAELGLVPHLORLG MOP5  
  
498 TPSDGSSTROSSPEPNSPEYCFYVDSOMVNEFKLELVEKLFADTEAKNPFSTODTOL MOP1  
500 VIEKLFANDTEAKDOCSOTOTDFNELDLETLAPYIPHDGEGFOLSPICEPERLLAENPOST MOP2  
595 EAHAVIMSLLEADAGLGGPVDFSOLPWPL MOP3  
506 DOLERTIRILOANIRWOOEELHKTOEOLCLVODSNVOMFLOOPAVLSFSSTORPEAOQQ MOP4  
452 PGPALPEAFYPLGLPYPGPAGTRLPKRGD MOP5  
  
558 DLEMLAPYIPHDDOLFORSFDOOLSPLESSASPESASPOSTIVTFQOTIQIODEPTANATIT MOP1  
560 POHCFSAMNITFOPLAPVAPHSFLLDKFQOOLESKKTEPERPHSSIFFDAGSKASLPP MOP2  
566 LOORSAAVTOPOLGAGPOLPGOISSAOVTSOHLRESSVISTOGPKPMRSSOLMOSSGRS MOP4  
  
618 TATIDELKTVIKDRMEDIKILTIASPSPIHKEITISATSSPYRDTOSRTASPNRAGKVI MOP1  
620 CCGOASIPLSHSGRSNTOWPPDPLHFGPIKWAVGDORTIEFLGAAPLGPVSPHVSIF MOP2  
626 IPAERRSLPLPVGLVS... MOP4  
  
678 EOTEKSHPRSPNVLSVALSORTIVPEEELNPKILALONAORKKRMEHOGSLFOAVGIGITL MOP1  
680 KTRSAKFGARGPNVLSAMVALSNKLKLKROLEYEKOAFODPSGGDPPGGTSHLMWKR MOP2  
  
738 LOOPDDHAAITISLWKRKVGCKSEONGMEOKTIIILIPSDACRLLGSMDESGLPOLIS MOP1  
740 MNLRGGSCPLMPDKPLSANVPNDKLTIONSHRGLGHPLRHLPLPOPPSAISPGENSKSRF MOP2  
  
798 YDCEVNAPIOGSRNLLOGEELLRALDOWN MOP1  
800 PPOCYATOYODYSLSAHKVSAGMARLLGPSFESYLLPELTRYDREVKVPVLGSSSTLLOG MOP2  
  
860 GDLLRALDOATM MOP2

FIG. 2

1 MSKEAVSLWALIVSLOPPVPLVCVREMTGSGRRKQOOCVTLPIISRELCLFVLLFPFRPLEVTEHOGGIGN MOP3  
1 MTADEKKRSSSER MOP2  
1 MDEDEKRA MOP4  
1 NSRRPALRAAAAGARAGGPGSGOPPEOH MOP5  
  
18 RKEKSRDAARSRKSEKESEVFEYELAHOLPLPHNVSSHLDKASVRLTISYLRVRKLLDA-- MOP1  
15 RKEKSRDAARSRKSEKESEVFEYELAHOLPLPHNVSSHLDKASVRLTISYLRVRKLLSSVC MOP2  
71 AREAHOSIETKRRDKHNSFIDELASLVTICNAMSRLDKLTLVLRMAVOHRLTIRGAINPY MOP3  
9 KASRNKSEKKRRDOFNVLKELSSMLP---GNTRKMDKITVLEEVIIGFLOKHEVSAOT MOP4  
29 ----- MOP5  
basic region  
helix-loop-helix  
A-repeat  
129 GHSVDFTHPCDHEEMREMIHR-----NG--LVKKGKEONT- MOP1  
128 GHSIFDFTHPCDHEEIRENLSLK-----NGSGFGKSKGHSI- MOP2  
187 GOSLFDLHPKDIKAKVEQSSDITAPERLIDAKTCLPVKTDITPSPSLKSGARSFF MOP3  
125 DONLFDLPEOEHSEVYKILSS-----HMLVID-----SPSEYKSGDGLFE MOP4  
70 GSSVFDYHPGDHSEVLEQGLRITIP-----GPTTPPSVSSSSSSSLADIPEIEASL MOP5  
164 -----ORSF-----FLRMKCTILSRGRTHNIKSATW-KVLHCITGHITHVYDT-N MOP1  
165 -----ERDF-----FMRHKCIVINRGRIVNLKSAIW-KVLHCIGOVKYVYNCP MOP2  
247 CRMKCNRPVAKVEDKDFPS-TCSKKKAORKSFCTIHST---GYLKSWP-PITKGLDEONE MOP3  
169 CHLL-----RGLSNRKEFTIYEYIKFVGNFRSYNNVPSPCNGFDNLSRCPRLAIGE-- MOP4  
125 TKV-----PPSSLVQERSF-----FVRMKSTLTKRG--LVHKASGY-KVITHVTRGLRAHA--- MOP5  
205 SNPOCCGYKKPPMICLVLC-----EPIPHPSNIEIPLDS--KIFLSRHSIDMKFSYCDER MOP1  
207 PHNSLCGYKEPLLSCLIIMC-----EPIDHPSMDIPLDS--KIFLSRHSIDMKFTYCDOR MOP2  
302 PDNECCN-----LSCLVAIGRLHSHVPOPVNCEIRVKSIM--EYVSRHAIDGKFVFDOR MOP3  
223 -----VCFIATVRLAT---POFLKEMCIVDEPLEEFTSRHSLEWKFLFLDHR MOP4  
172 -----LG-LVALG-----HILPPAPLAELPLHG--HHIVFRLSLGLLILACESB MOP5  
259 ITELMGYEPEELLGRSIEYHYHALDSHLTKTHDMFIT-KGOVITIGOYRMLAKRGGYVW MOP1  
261 ITTELGYHPEELLGRSAVEFYHALOSENMTKSHONLCT-KGOVVSOGYRMLAKHGGYVW MOP2  
355 ATAILAYLPOELLGISCYCYFHODDIGHLAECRHOVLDTIREKTIINCYKFKIKOGSFTIL MOP3  
267 APPITIGLPEFVLGTSYDYHYHIDDELLARCHOHLMOF-GKCKSCCYRFLTKGOOWJWL MOP4  
213 VSDHDDLGPSELVGRSCYQEVHGDDAIRLRQSHVDLLD-KGOVHI GYRWRORAGGFVWL MOP5  
B-repeat  
318 ETOATVIYNTKNSOPOCIVCVNYVVSIGIIHODLIFSLQOETECVLKPVSSDMKMTQLFTK MOP1  
320 ETOGITVYNPNRLPOCIHCNVNYLSEITEKNDVVFSSHODTESLFKPHLMHNSIFDSSGK MOP2  
415 RSRWFSFHWNTKEVEYIVNTVLANVLEGGDIFPOLIASPHSMDSMLPSGEGPKR MOP3  
326 QTHYYITTHOWNSKPEFIVCTHVSIVYADYVERROELALEDPPEALHSSALKDKGSSL MOP4  
272 OSVATVAGSGKSPGEHVLWVSHVLSOAEGGQIPLDAFOLPASVACEEASSPGPEIPE MOP5

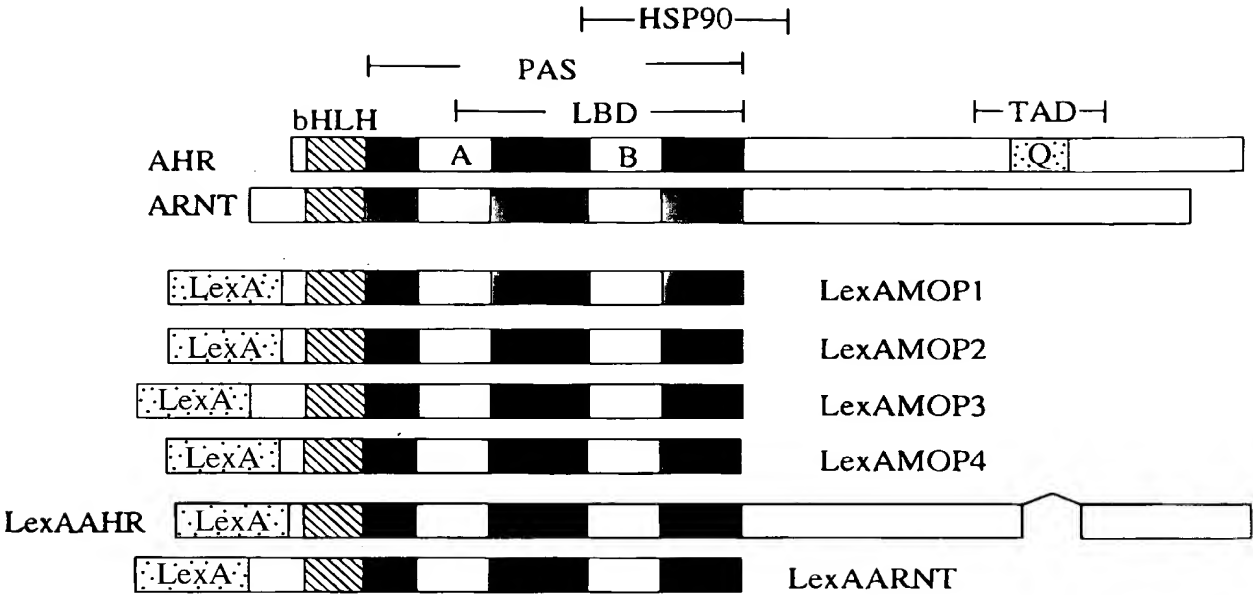


FIG. 3A

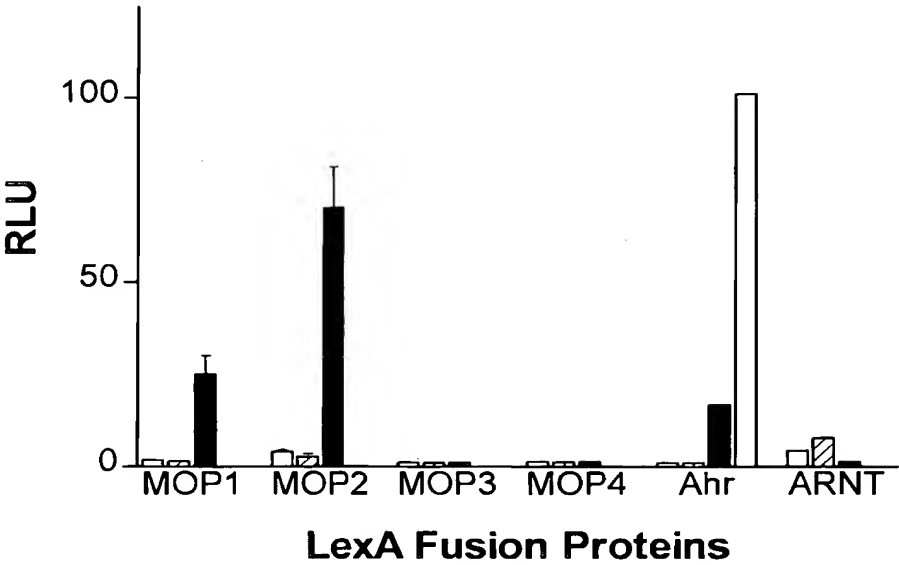


FIG. 3B

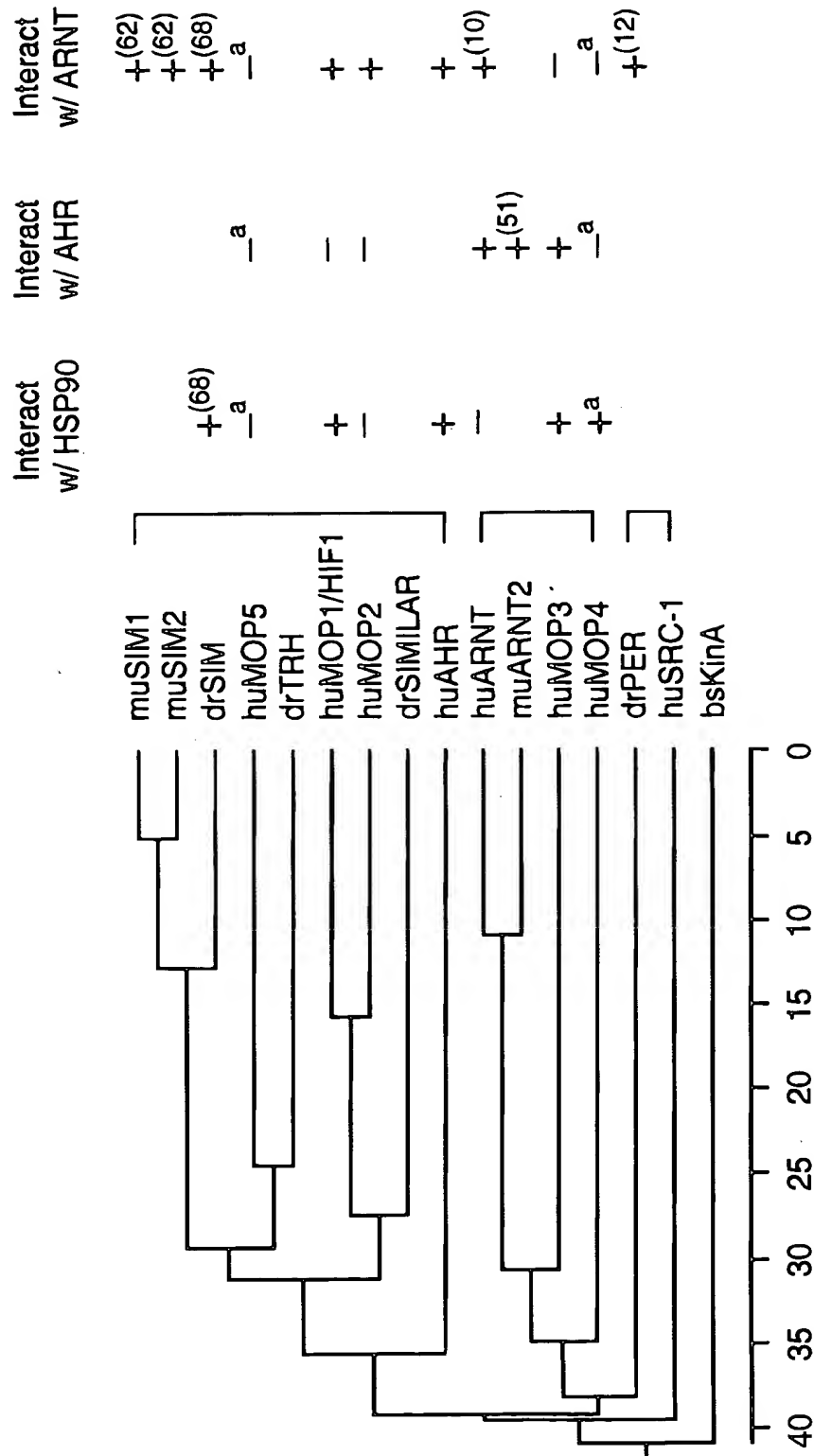


FIG. 4

g	g	G	G	C	A	C	G	T	G	A	C	A	C
G	G	T	A	C	A	C	G	T	G	A	C	C	c
t	g	a	a	C	A	C	G	T	G	A	C	C	C
t	g	a	a	C	A	C	G	T	G	A	C	T	C
g	g	G	C	C	A	C	G	T	G	A	C	C	T
G	G	G	A	C	A	C	G	T	G	A	C	C	g
c	T	A	A	C	A	C	G	T	G	A	C	C	G
g	a	a	c	C	A	C	G	T	G	A	G	C	T
t	g	a	a	C	A	C	G	T	G	A	C	A	C
g	G	G	T	C	A	C	G	T	G	A	C	T	C
G/T	G	A/G	A	C	A	C	G	T	G	A	C	C	C
-7	-6	-5	-4	-3	-2	-1	+1	+2	+3	+4	+5	+6	+7

**FIG. 5**

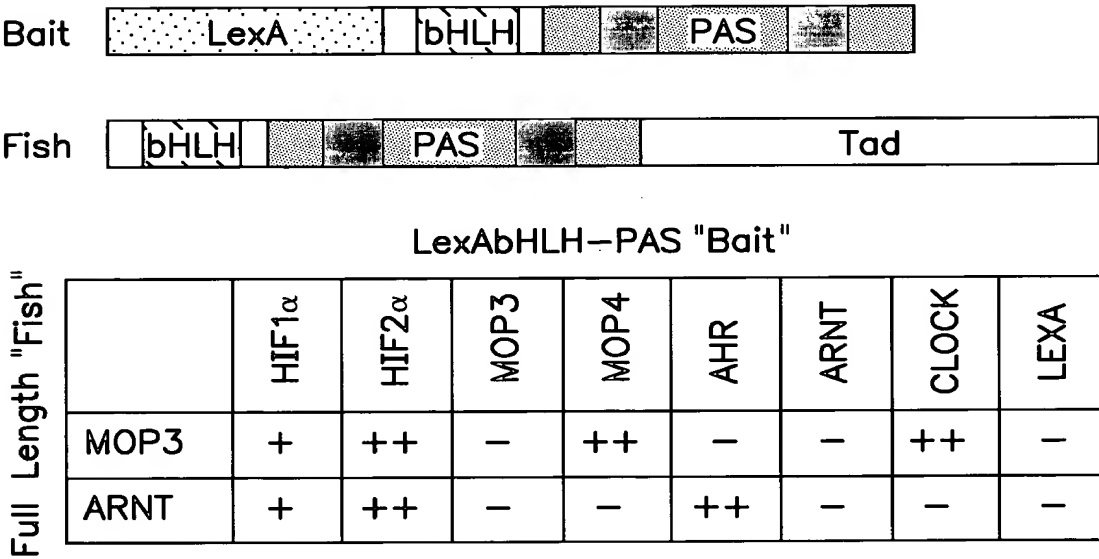
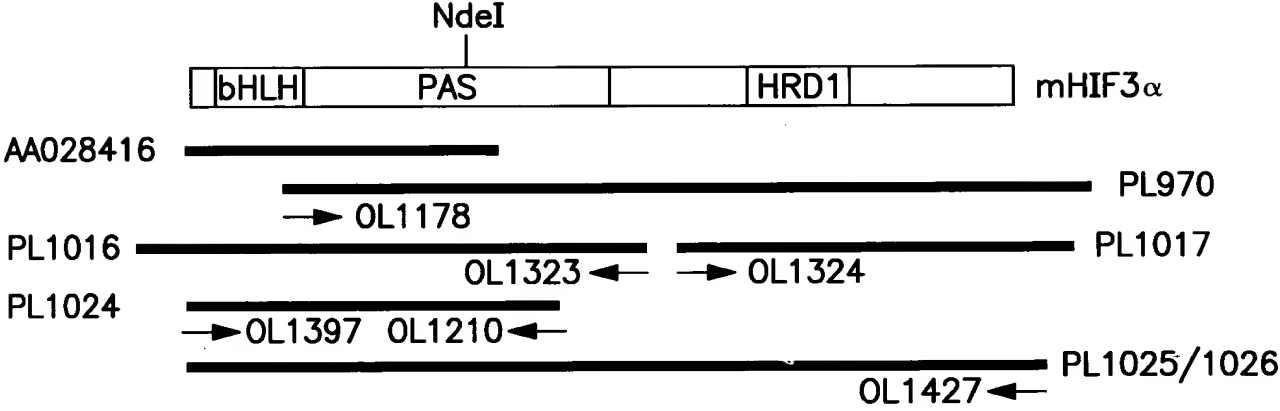


FIG. 6



**FIG. 7**

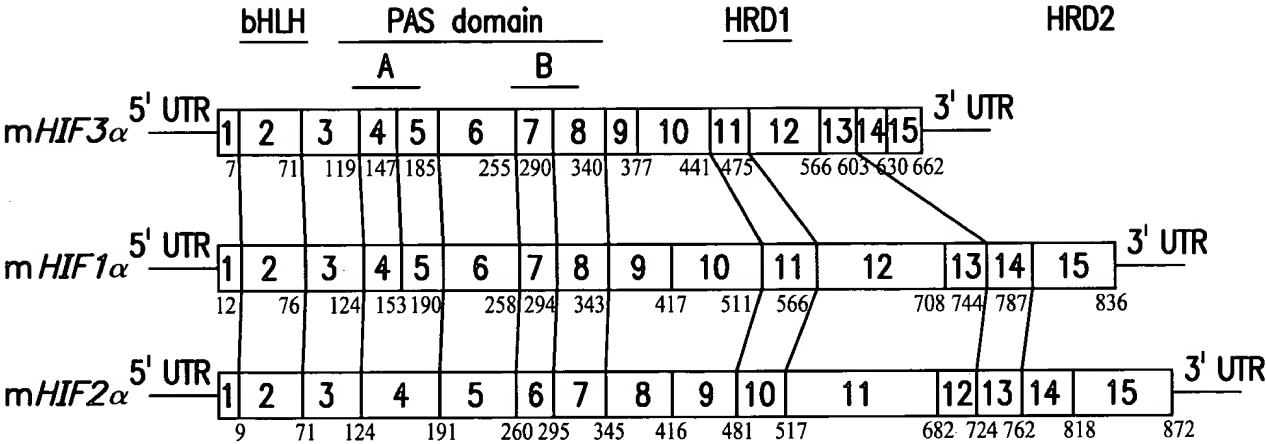


FIG. 8